

I claim:

1.

In combination with a negatively pressurized enclosure having a pair of end walls, a pair of side walls, and a roof, comprising:

a dual fuel gas turbine in said enclosure;

said gas turbine including a circumferential array of combustors;

each of said combustors having a gaseous fuel line and a liquid fuel line in communication therewith for supplying either gaseous fuel or liquid fuel thereto;

each of said liquid fuel lines having a check valve imposed therein which is open when said gas turbine is being fueled with liquid fuel and which is closed when said gas turbine is being fueled with gaseous fuel;

and a cooling air conduit having an air inlet end in communication with ambient air outside of the enclosure and an air discharge end which directs ambient air onto at least some of said check valves to cool the same.

2.

The combination of claim 1 wherein said cooling air conduit comprises an air manifold which supplies ambient air onto a plurality of check valves.

3.

The combination of claim 1 wherein a fire dampener door selectively closes said air inlet end of said air conduit.

4.

1 The combination of claim 3 wherein said door is pivotally mounted at said air inlet end and is movable between open and closed positions.

5.

5 The combination of claim 4 wherein a solenoid actuator is connected to said door for pivotally moving said door.

6.

10 The combination of claim 2 wherein said air manifold includes a pair of air inlet ends which are positioned in opposite walls of the enclosure.

7.

The combination of claim 6 wherein said air manifold includes a plurality of pipes which extend to said check valves.

8.

15 The combination of claim 7 wherein said air discharges ends of said pipes at least partially surround said check valves.

9.

20 In combination with a negatively pressurized enclosure having a pair of end walls, a pair of side walls, and a roof, comprising:

a dual fuel gas turbine in said enclosure;

said gas turbine including a circumferential array of combustors;

each of said combustors having a gaseous fuel line and a liquid fuel line in communication therewith for supplying either gaseous fuel or liquid fuel thereto;

1 each of said liquid fuel lines having a check valve imposed therein which is open when
said gas turbine is being fueled with liquid fuel and which is closed when said gas
turbine is being fueled with gaseous fuel;

5 an air manifold positioned within said enclosure and having at least one air inlet end
which is positioned in one of the walls of the enclosure so as to be in
communication with ambient air outside of the enclosure;

said air manifold having a plurality of pipes, having air discharge ends, which extend to
at least some of said check valves so that ambient air is directed onto said check
valves to cool the same.

10 10.

The combination of claim 9 wherein said air manifold includes a pair of air inlet
ends positioned in the walls of the enclosure.

11.

15 The combination of claim 9 wherein a fire dampener door selectively closes said
air inlet end of said air manifold.

12.

20 The combination of claim 10 wherein a fire dampener door selectively closes
each of said air inlet ends of said air manifold.

13.

The combination of claim 9 wherein said air discharge ends of said pipes at least
partially surround said check valves.

14.

1 In combination with a dual fuel gas turbine positioned within a negatively
pressurized enclosure, the gas turbine including a circumferential array of combustors;
each of the combustors having a gaseous fuel line and a liquid fuel line in
5 communication therewith for supplying either gaseous fuel or liquid fuel thereto; each of
the liquid fuel lines having a check valve imposed therein which is open when the gas
turbine is being fueled with liquid fuel and which is closed when the gas turbine is being
fueled with gaseous fuel, comprising:

10 a cooling air conduit having an air inlet end in communication with ambient air outside of
the enclosure and an air discharge end which directs ambient air onto at least
some of the check valves to cool the same.

15.

15 The combination of claim 14 wherein said cooling air conduit comprises an air
manifold which supplies ambient air onto a plurality of check valves.

16.

The combination of claim 14 wherein a fire dampener door selectively closes said
air inlet end of said air conduit.

17.

20 The combination of claim 16 wherein said door is pivotally mounted at said air
inlet end and is movable between open and closed positions.

18.

1 The combination of claim 17 wherein a solenoid actuator is connected to said door for pivotally moving said door.

19.

5 The combination of claim 15 wherein said air manifold includes a pair of air inlet ends which are positioned in opposite walls of the enclosure.

20.

10 The combination of claim 19 wherein said air manifold includes a plurality of pipes which extend to the check valves.

21.

The combination of claim 20 wherein said air discharges ends of said pipes at least partially surround the check valves.

22.

15 The method of cooling a liquid fuel check valve of a dual fuel gas turbine positioned in a negatively pressurized enclosure, comprising the steps of:
providing an ambient air inlet opening in the negatively pressurized enclosure;
providing an ambient air conduit means having air inlet and air discharge ends;
20 connecting said air inlet end of said ambient air conduit means to said ambient air inlet opening whereby the negative pressure in the enclosure will draw ambient air into and through said ambient air conduit means;

positioning said air discharge end of said ambient air conduit means with respect to said
check valve so that ambient air being discharged from said air discharge end of
said ambient air conduit means will pass over said check valve to cool the same.